MONARCH® 926™ KNIFE ADDENDUM

Use these instructions with the Monarch® 9855® printer and the optional knife. Information in this document supercedes information in previous versions. Check our Web site (www.monarch.com) for any updates.

**Caution:** **Do not** place your fingers or any other objects into the knife.

Installing the Knife

The knife, printer, and stacker must be installed on a level surface. Turn off the printer before you install the knife.

**1.** Using a Phillips screwdriver, remove the base cover.
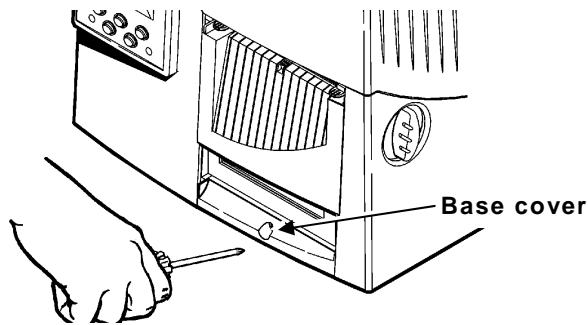
Base cover

2. Replace the screw. You can throw away the base cover.

3. Press down on the exit cover tabs to open the exit cover on the front of the printer.
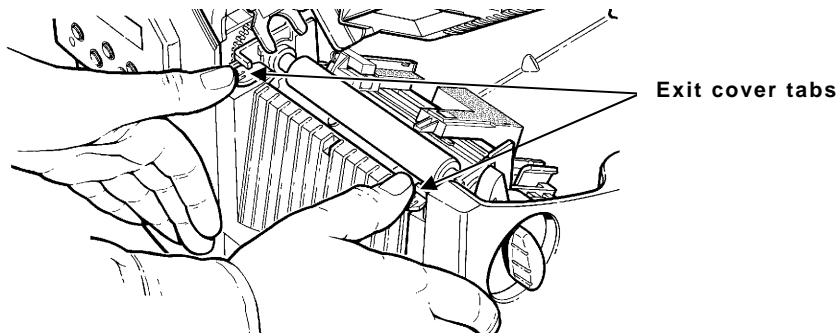
Exit cover tabs

4. Remove the printer's exit cover by pressing in the center and pulling it out. The exit cover will flex when you press in the center. You can throw away the exit cover.

Press here
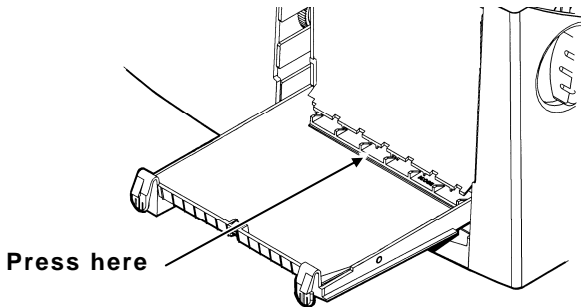
5. Attach the printer's connectors to the knife's board as shown. The small connector (2-pin) is keyed and attaches from the top. The large connector (9-pin) attaches from the side.

Note: **Do not** force the connectors onto the board. This damages the board.

6. Align the knife in front of the printer's exit chute by lining up the three holes on the knife bracket with the three holes on the printer's base plate.

7. Using the thumbscrews provided, loosely screw the knife bracket onto the printer's base plate. Do not tighten the thumbscrews.

Screw

Knife bracket
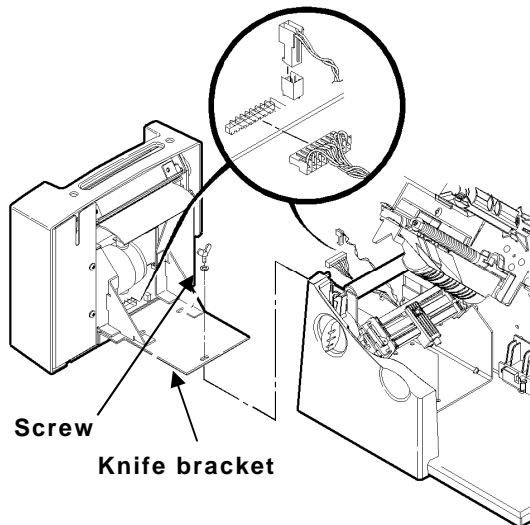
8. Push the knife toward the printer until the knife does not pivot or rotate. Be sure to center the knife in the printer's opening.

9. Tighten the thumbscrews.

10. Turn on the printer.

Cut a batch of tags to check the cut angle. If the cut is not straight (parallel to the printed image), adjust the cut angle.

Adjusting the cut angle

To adjust the cut angle:

1. Loosen the thumbscrews.

2. Slightly rotate the knife to the left or to the right. The knife may appear to sit at a slight angle to the printer.

3. Tighten the thumbscrews.

Cut another batch of tags. If you are unable to adjust for a straight cut, call Service.

Using the Knife

The installed knife is two and a half (2-1/2) inches away from the printhead. Pressing and holding **Feed/Cut** for two seconds marks the tag under the printhead to be cut when it reaches the knife. Depending on the length of your supply, you may lose up to two tags after the last batch. However, if you have extended backfeed enabled, you do not lose any tags after the batch. For more information about extended backfeed, refer to the optional *Packet Reference Manual* available on our Web site.

Note: The knife operates when the printer is running. If the printer is paused, the knife stops cutting.

Adjust the cut position from the keypad or use the supply setup packet. Refer to the optional *Packet Reference Manual* for more information.

If using a 9855 printer, adjust the cut position from the printer's keypad as shown:

To change the setting, from the Main Menu, select Setup, Supply, then Positioning. Then, follow these steps.

1. Press ← or → until you see

    ```
    POSITIONING
    ← Cut Pos        →
    ```

2. Press **Enter/Pause**. You will see the current setting, for example:

    ```
    Enter knife adj
    [-300/300]:  +0
    ```

3. Press ← or → to change the cut position. Pressing ← decreases the value (moves the cut down); → increases it (moves the cut up). The cut position adjusts where the tag is cut. The printer adjusts the cut position according to the black marks on the supply. You may need to adjust for aperture supplies.

Note: We do not recommend setting a positive cut position while using extended backfeed. You may cut off the leading edge of the next tag.

4. Press **Enter/Pause** when the number you need appears. Press **Escape/Clear** to exit to the Setup menu.

To adjust the cut type or cut multiple, your System Administrator should send the Batch Control Field.

Defining the Batch Control Field

The batch header must precede this field. The batch control field defines the print job and applies only to the batch that immediately follows.

Syntax `E,feed_mode,batch_sep,print_mult,multi_part,`
`cut_type,cut_mult⌐`

    E1. *E*   Batch Control Field.

    E2. *feed_mode*   Feed Mode. Options:
                        0 Continuous Feed (default)
                        1 On-demand

E3. *batch_sep* Batch Separator (striped label between batches).
Options:
0 Does not print a separator (default)
1 Prints a separator
2 Double-length separator- prints 2 tags

Note: If using non-indexed supply, the batch separator is always six inches long. If using a stacker, the batch separator is always 3.66 inches long.
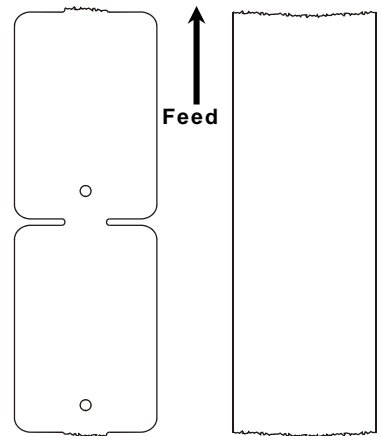
E4. *print_mult* Number of tags with the same image. 0 is the default.
Range: **1** to **999**

E5. *multi_part* Number of identical parts on one tag. 0 is the default.
Range: **1** to **5**

E6. *cut_type* Enables or disables the knife. Options:
0 Does not cut (default)
1 Cuts before, during, and after last tag – printed tag(s) left between printhead and knife.
2 Cuts in strips, not each tag – printed tag(s) left between printhead and knife.
3 Cuts before, during, and after last tag – no printed tags left between printhead and knife.
4 Does not cut before first tag, cuts each tag and after the last tag – printed tag(s) left between printhead and knife.
5 Cuts in strips, not each tag – no printed tags left between printhead and knife.

| | | | | **Recommended Settings for optimal performance with:** | | | |
| | **Description of cut mode operation** | | | **Straight Edge Tags** | | **Edge Aperture Tags** | |
Cut Mode	**Cut Before first tag in Batch?**	**Cut Between Tags?**	**Cut After Batch?**	**Extended backfeed**	**Overstrike w/verifier**	**Extended backfeed**	**Overstrike w/verifier**
0	No	No	No	Yes	Yes	No	No
1	Yes	Yes	Yes*	Yes	Yes	Yes	Yes
2	Yes	No (Feeds strips)	Yes*	Yes	Yes	No	No
3	Yes	Yes	Yes**	No	Yes	Yes	Yes
4	No	Yes	Yes*	Yes	Yes	No	Yes
5	Yes	No (Feeds strips)	Yes**	Yes	Yes	No	No

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* The last tag in the batch is queued to be cut once it reaches the knife; however, there may be printed tags left between the printhead and the knife. The user must press **Feed/Cut** or send another batch to feed the last tag out far enough to be cut.

** The printer feeds the last tag in the batch out far enough to be cut. No user intervention is required to cut the last tag.

Note: Using "overstrike/continue" as the Error Action minimizes the number of RFID tags left between the printhead and the knife. To use the least amount of RFID tags, set overstrike to five.

Feed

Edge Aperture   **Straight Edge**

E7. cut_mult   Number of tags to print before cutting. A cut multiple of one cuts after each tag. The range is 0 to 32,000. 0 is the default. The cut multiple is a multiple of the print quantity. If the cut multiple is three and the print quantity is 16, then five sets of three tags and one set of one tag is produced.

Note: The last tag in the batch is always cut, regardless of the multiple.

Example   `E,0,1,4,2,1,4`

Defines a batch control field. Continuous feed mode is used and a separator prints between batches. Four tags have the same image and there are two identical parts on one tag. The knife cuts after every four tags.

Special Considerations

When using the knife, note the following items:

♦ Depending on the length of your supply, you may lose up to two tags at the end of a supply roll and after the last batch, unless extended backfeed is enabled.

♦ At the end of a supply roll, two tags may be left uncut if you are using 1.2-inch supply. When the printer is out of supplies, 756 appears on the display. The printer recalibrates after you load new supplies; however, supplies will not be cut during recalibration.

♦ The maximum print speed using the knife is 6.0 inches per second.

♦ The printer recalibrates after errors numbered 700 - 799, except for errors 758, 761, and 764.

♦ The supply may shift as the knife cuts and you may see a small disruption on the printed supply. This shift does not affect bar code quality.

Clearing a Knife Jam

If tags are jammed in the knife, the printer displays 760 on the LCD. To clear a knife jam, you might have to disconnect the stacker from the knife.

1. Turn off the printer.

2. Clear the tag path by using a tool, such as a screwdriver or needle-nose pliers, to pull the jammed tags out of the knife.

Caution: **Do not** place your fingers near the knife's blade.
Do not use excessive force to remove tags. This may damage the knife.

**3.** Turn on the printer. Send a test batch of tags to the printer.

Lubricating the Knife

We recommend lubricating the knife after using 15 rolls of supply or performing 100,000 cuts.

To prevent excessive wear on the knife, regularly lubricate the knife's cams. The cams are located directly below the guiding holes.

To lubricate the knife:

Guiding hole

Cam

Guiding hole

1. Turn off the printer.

2. Lightly coat a long cotton swab with multi-purpose grease.

3. Insert the cotton swab into one of the two guiding holes until it stops on the cam.

4. Move the cotton swab up and down several times to coat the cam with grease.
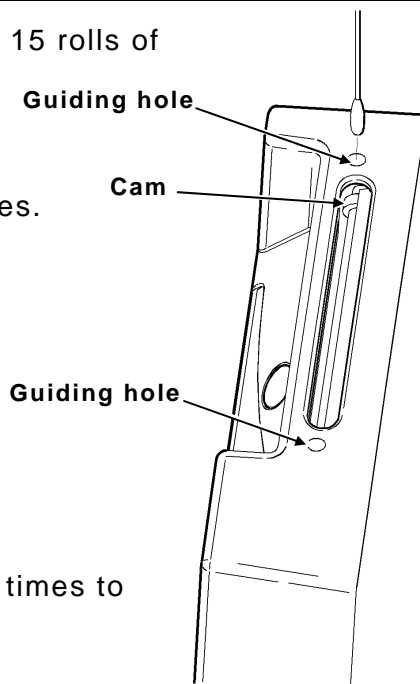
5. Repeat steps 2 - 4 for the other cam.

6. Wipe off any excess grease from the top cover of the knife.

7. Turn on the printer.

Tag Cut Dimensions

Use these specifications for the knife.

Widths: 0.75 to 4.0 inches (19 mm to 102 mm)

Lengths: 0.75 inches (19 mm) without cutting
                     1.2 to 16.0 inches (30 mm to 406 mm) with cutting

> **Note:** The maximum cut tag length using the stacker is 3.66 inches (93 mm).

Thickness: 7 to 10 mils

Batch Separator: 3.66 inches (93 mm)

Using the 9855RFMP Printer

The above specifications apply to using the knife with an RFID printer with the following exceptions:

♦ The minimum cut width is 1.5 inches (38 mm).

♦ The minimum cut length is 1.5 inches (38 mm).

♦ Use only Monarch® approved RFID tag supplies.

♦ The knife can cut our manufactured tags up to 14 mils thick only for RFID applications. We do not recommend cutting competitor's RFID supplies.

♦ The limited warranty on knives used in or with RFID printers is one (1) year from the date of shipment, or 500,000 cuts, whichever occurs first.